dtcd news

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A quarterly of the United Nations Department of Technical Co-operation for Development. Vol.3 No.4 December 1990

Africa Initiative moves ahead

In Sudan, the needs of nomads are addressed by the regional strategy plan for the Eastern Region. The *African Initiative* strengthens national capacities to carry out such plans

The *Africa Initiative* being jointly undertaken by the Japanese Government and UNDTCD in support of Africa's capacity building efforts in development planning and economic management during the 1990–91 biennium has been making headway on its three main fronts: human resources development, needs assessment and institution upgrading.

On the first front, a series of workshops aimed at the sharing of experiences on an interregional level has been launched. It will begin with a workshop to be held March 1991 in Dakar, Senegal which will focus on "new approaches in regional planning" and cover key issues related to the spatial aspects of planning and economic management in African countries.

During 1991 and 1992 two other workshops are being contemplated. One topic to be covered will be methodologies, techniques and national experiences in the field of long-term perspective planning. Another will be the public investment programming process as a central mechanism of economic management and development planning. Workshop participants will also become acquainted with techniques developed through UNDTCD-executed projects which are aimed at assisting developing country planners in their efforts to integrate a social dimension into structural adjustment programmes and policies.

These techniques include a data bank that enables planners to monitor socio-economic variables such as education, health, demography, employment, producer and consumer prices, food production and consumption, and also to obtain a quick overview of evolving socio-economic conditions. In addition, the SCOFLUX model (see *DTCD Newsletter* Vol 2 No 2, June 1989) provides planners with a quantitative as-

[See **Africa** *on page 2*]

Peru steps up energy efficiency

When world oil prices are low, not every country has had the foresight to introduce a concerted energy conservation programme. This has been done in Peru, with impressive results. In 1989 and 1990, energy efficiency improvements in the productive sector have permitted savings of over 200,000 barrels of oil. Some 600,000 are expected to be saved in the 1991–92 period.

Behind this success is an independent national institution, created and developed with UNDTCD technical assistance since 1984 under UNDP funded projects. The Center for Energy Conservation (CENERGIA) has the mandate to formulate energy conservation policies and programmes, to conduct energy audits and to implement energy saving measures in the industrial, transport, residential and commercial sec-

[See **Energy** *on page 4*]

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Hydropower for southwest Ethiopia

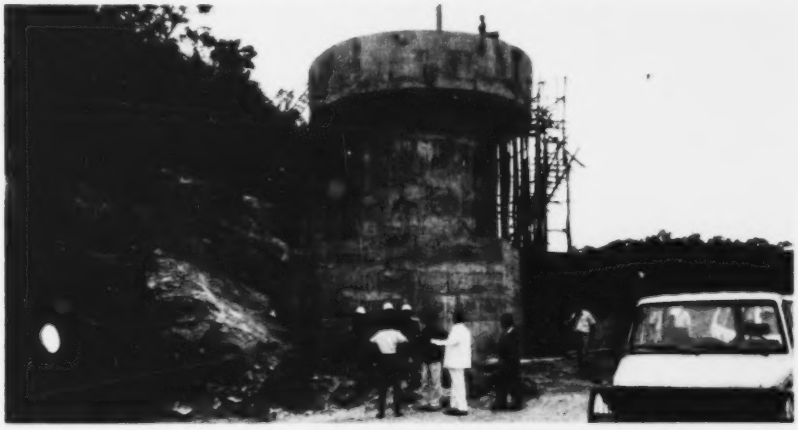
A new hydropower plant is being built which should help tap the agricultural potential of Ethiopia's resource rich Illubabor region. Some 600 km southwest of Addis Ababa, this region is being relied upon for the resettlement of many families no longer able to subsist on the exhausted land of the country's northern highlands. The Sor Hydroelectric Plant, to be inaugurated in April 1991, is being constructed by the Ethiopian Electric Light and Power Authority (EEPLA) with technical assistance from UNDTCD under a project begun in 1985. It is being financed with $1.5 million from the United Nations Capital Development Fund and $13 million from the Italian Government Trust Fund.

This small-scale hydropower development project consists of 2 units of 2.5 MW each and an associated 240 km transmission line, three sub-stations and a distribution network covering 40 km of lines to neighboring villages. Based on a "run of river" scheme, the station is located on the Sor river, a tributary of the Gebba.

Once operational, the plant should provide reliable, low-cost power to some 62,500 people in this rural region in 1991 and to over 212,000 by the year 2000. It will also reduce reliance on imported hydrocarbon fuels and provide electricity for irrigated agriculture.

The EELPA organized work force brigades for the construction of civil works, erection of electro-mechanical equipment and construction of sub-stations, transmission and distribution lines. Since work began in April 1987, hundreds of Ethiopians have become skilled in the construction and erection of hydropower stations. This new pool of skilled human resources will be tapped for the future development of the country's energy sector. ■

View of the discharge water canal, with the powerhouse and the pen-stock (pipe carrying water to the plant from a higher level) in the background



The surge chamber of the Sor hydroelectric plant under construction. This tank prevents excessive pressure build-ups during regulation of the turbine

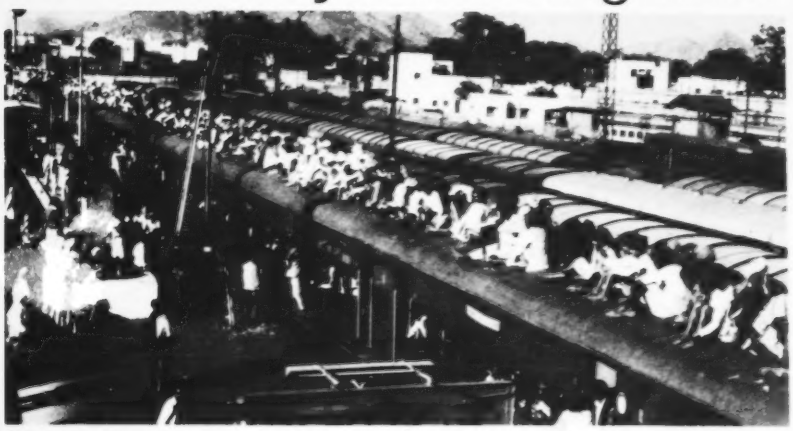
[*From* **Africa** *on page 1*]

sessment of the short- and long-term effects of economic policies and adjustment programmes on school enrolment and the supply of education. Finally, through another model, Gestion de l'emploi dans l'administration publique (GEAP), planners can see the specific consequences of different scenarios of budget cutbacks in terms of civil servant recruitment, layoffs, retirements and promotions.

On the second front, a series of in-house assessment studies are to be carried out on the impact of UNDTCD-executed technical co-operation projects on planning and economic management in Benin, Burkina Faso, The Gambia, Malawi, Senegal, Zambia and Zimbabwe. These studies should lead to guidelines for technical co-operation in this area. In addition, a special study is being planned to provide a comparative analysis of Asian and African economic development experiences.

On the third front, creating new and upgrading existing institutions devoted to teaching and applied research in the fields of economic planning and management in Africa, progress is also being made. Consultations have begun with a view to upgrading development institutions in Africa through twinning arrangements with Asian and possibly with Latin American institutions. In November and early December, for example, the Director-General of the Institute of Techniques of Planning of Madagascar (IMATEP) visited Asian regional development centres in Malaysia as well as a few Japanese development institutes with strong Africa programmes. ■

Indian railways: New rolling stock



The volume of riders far exceeds the capacity of Indian Railway facilities, as can be seen from this scene of passengers riding on the roofs of coaches at the Ajmer Junction.

India's rail network is the largest in Asia and the second largest public railway system in the world. Under a single management with a fleet of 10,211 locomotives, 30,195 passenger service vehicles and 374,753 goods wagons, Indian Railways carries over nine million passengers and three quarters of a million tons of freight each day. The most important transport system in the country, it connects 7,865 stations and operates on three gauges: the broad, the meter and the narrow.

Under this project, Indian engineers were sent to the British Centre for Engineering and Scientific Training for tailored instruction meeting their particular needs.

By the turn of the century, it is estimated that Indian Railways will be required to handle double the load carried now. To meet the projected need, a Master Plan has been formulated for the years 1985–2000 to increase by 90 per cent the capacity of the system to carry freight and passengers, reduce transport costs by 15 per cent, improve the quality of service and reduce the number of accidents. To achieve these goals, Indian Railway's basic infrastructure, including track, rolling stock, signalling and communications systems, must be extensively modernized.

Since December 1986 and at the request of the Indian Government, UNDTCD has been assisting the Research Designs and Standards Organization (RDSO), located in Lucknow, which is responsible for the design and testing of railway rolling stock. Under a UNDP-funded project to be concluded in 1992, UNDTCD has been assisting the RDSO to develop passenger coaches and freight wagons with higher capacity and improved reliability compared with those presently operating in India. This includes the design, production and testing of prototypes of specialized freight wagons and of coaches which can accommodate more passengers and provide them with a faster and more comfortable ride. Also under this project, engineers from the Railways and from India's rolling stock industry are being trained in manufacturing, testing and maintenance techniques.

The project is setting up modern testing facilities in existing laboratories, preparing technical feasibility reports on new railway rolling stock designs, technical manuals on design, testing, maintenance and operation of newly developed rolling stock designs and producing rolling stock prototypes. ■

Saudi Arabia: New urban infrastructure planning project

Saudi Arabia's rapid economic growth over the past 20 years has led to unprecedented and largely unplanned expansion of its cities. Recognizing the negative effects of this type of growth, the government undertook the delineation of urban boundaries in 1986, a task completed in 1989.

At the government's request and under a three-year, $6 million project beginning in January 1991 and funded by the Kingdom of Saudi Arabia, UNDTDC will now help the country build up its national capacities in the field of urban infrastructure planning.

UNDTCD will be assisting the Ministry of Municipal and Rural Affairs, which is responsible for spatial planning at the central level, and will be working with staff from the different municipalities in the Kingdom.

Broad scope

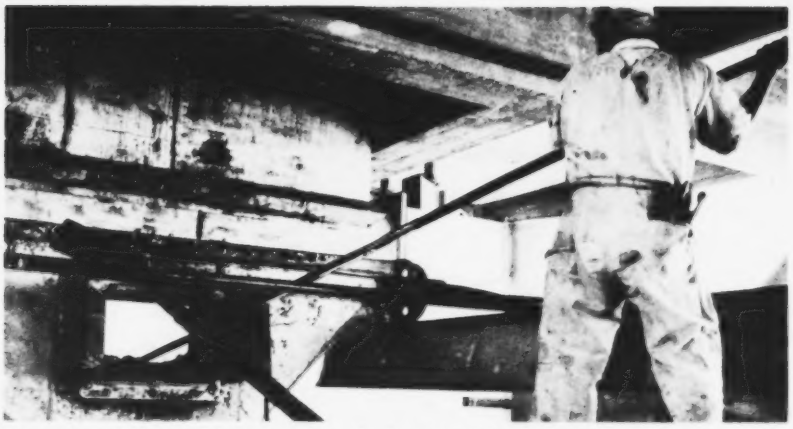
The project will be broad-scoped, covering urban planning and design, research, traffic and transportation, public utilities, mapping, surveying and cartography, including geodetic mapping and photogrammetry, information systems, as well as municipal infrastructure.

By the project's completion, urban infrastructure plans will have been prepared for over 100 cities. In addition, a large cadre of professionals will have been trained to take over planning and implementation functions at the municipal level, reducing reliance on consultants and foreign experts.

The project is also to utilize and develop the resources of Saudi Arabian universities to enhance national capabilities in infrastructure planning at the urban and rural levels.

An important aspect of the project is to ensure that within development plans, infrastructure maintains and safeguards religious and cultural values. ■

READEX FICHE



An energy audit taken at this cement plant by the project identified a potential for fuel savings which could save the firm over $2 million a year.

[*From* **Energy** *on page 1*]

tors of the economy.

One of the first tasks of CENERGIA's staff of approximately 20 was to carry out a national campaign to raise public awareness about the benefits of energy audits and the need for conservation measures (See *DTCD Newsletter,* Vol.1, No.3. December 1988). Audits were then conducted at different industrial enterprises and buildings such as hospitals and department stores. This was followed up with specific recommendations on how energy savings can be achieved and with demonstrations of energy saving technologies.

It works, it pays

In the past two years, 30 such audits have been carried out and improvements made at little or no cost have reduced oil consumption by 10 per cent at the sites visited. Fees charged for such audits are now covering half of CENERGIA's operating budget, a figure expected to climb.

Peru could actually achieve far greater energy savings than it has so far. According to CENERGIA's calculations, further energy efficiency improvements could lead to savings of some 7 million barrels of oil per year. Some 40 per cent of this could be saved through measures costing little or no money.

Until now, the combination of low oil prices, subsidized prices of domestically produced oil and the difficult economic situation facing the country have discouraged investment in energy efficiency measures and technologies. It is expected, however, that the recent rise in world as well as domestic oil prices (petroleum fuel prices since September 1990 are about ten times what they were before) will provide the incentive required for additional investments in this area.

New phase

Under a fourth phase of this programme, to begin in 1992, CENERGIA will be consolidating its technical capabilities, undertaking energy conservation engineering projects, helping industries to introduce low cost conservation measures and carrying out more energy audits in industries. In addition, concerted efforts will be made to deal with energy-related environmental issues, such as the reduction of gaseous emissions as well as liquid and solid wastes from industries. ■

New name, same publication!

As you will have noticed, the *DTCD Newsletter* has now become dtcd news and has undergone a redesign by the United Nations Graphic Presentation Unit. The shorter name and new look, the first such changes introduced since the newsletter was launched in 1988, are part of our ongoing efforts to provide readers with an attractive, readable and useful quarterly summary of our work.

Dominican Republic: Major oil exploration agreement

UNDTCD assistance to the Government of the Dominican Republic in six months of complicated negotiations with Mobil Oil has had a happy ending. A petroleum exploration agreement, just signed by Mobil Exploration Dominicana Inc. an affiliate of Mobil Corporation, and the Dominican Republic, authorizes the company to explore for hydrocarbons in a 2.2 million hectare (5.6 million acre) concession area in the southern region of the country.The agreement also provides a number of important guarantees from the company.

Firstly, the company is commitment during the exploration period to perform extensive seismic studies and drilling, entailing a minimum investment of $10 million over seven years.

If oil is found and produced, Mobil will pay up 40 per cent income tax and a sliding scale royalty based on production. In addition, the company will pay a $500,000 signature bonus at the time the contract is ratified by Congress and a surface rent fee over the acreage retained after the exploration period expires. The agreement also establishes a debt-equity ratio, andlimits on interest rates that can be deducted from the tax base and on their source (only third party financing is allowed).

Environmental issues are addressed as well. Given the country's reliance on tourism, exploration work will only be allowed at safe distances from clearly defined tourist zones. Moreover, environmental impact studies must be carried out by the company and approved by the government before work can proceed.

The efforts of the UNDTCD investment advisory team to help the Dominican Republic negotiators work out a contract agreeable to both parties in a relatively short period of time follows up on the positive results of previous work in this country. In 1988 an agreement was reached between the government and Falconbridge with UNDTCD investment advisory services, and such services more recently assisted the government in an audit of a 50 million dollar debt of the country's major oil refinery, managed jointly with Shell Oil. ■

Environment and development: Preparing for 1992

The livelihood of developing countries is undermined when environmental considerations are not incorporated into development plans and projects

UNDTCD will be making substantial contributions to the preparatory work of the United Nations Conference on Environment and Development (UNCED), to be held in Brazil in June 1992. At this historic gathering the world community will be formulating strategies and identifying the practical means of achieving sustainable development.

As defined by the 1987 report of the World Commission on Environment and Development, sustainable development is the use of the existing resource base to meet the needs of today without undermining the ability of future generations to meet their needs.

Practical guidelines

A number of UNDTCD's recent and planned interregional seminars (see box) will be providing specific guidelines and related inputs to the two main working groups of the conference.

The first group will cover the protection of the atmosphere, the protection and management of land resources, the conservation of biological diversity and environmentally sound technology.

The second will focus on the protection of oceans, seas and coastal areas, the quality and supply of freshwater resources and the environmentally sound management of wastes.

Exploring new options

While many of the environment-related seminars organized by UNDTCD are in the fields of water, minerals and energy resources, new and sustainable development options are being carefully examined in other fields as well.

For example, seminars on the processing of satellite data, photogrammetry, remote sensing and cartography have familiarized seminar participants with tools to help them monitor and manage their natural resource base.

A mid-1991 seminar on road and bridge maintenance will stress the environmental aspects of transport sector development and rehabilitation.

In conjunction with the United Nations Statistical Office, UNDTCD is providing training through seminars and workshops on environmental statistics and environmental accounting.

The Department is also exploring the possibility of holding seminars on the environmental aspects or urban planning, the role of public administration in environmental management and the population/environment dynamic. ■

Seminars

Power plant maintenance, rehabilitation and distribution
Sweden, September 1988

Power plant maintenance, rehabilitation and distribution in the Arab region and Turkey
Jordan, June, 1989

Wind energy
Denmark, August 1989

Energy conservation in developing countries
Sweden, September, 1989

Water quality management
Poland, September 1989

Water resources planning and management in arid areas
USSR, October 1989

Solar energy applications
China, October 1989

Ground water management in drought-prone areas
India,
November-December 1989

Land information management in the developing world
Australia, February 1990

Mobilization of resources for optimal water development, allocation and conservation
Venezuela, December 1990

Aquifer over-exploitation, especially in developing countries
Canary Islands, April 1991

Environmental aspects of water resources developoment
Bulgaria, May 1991

International conference on mining and the environment
Germany, June 1991

Energy and the environment in the development process
China, June 1991

Application of computers in the coal mining industry
Czechoslovakia,
October 1991

Environmental aspects of water resources development
Bulgaria, October 1991

[*Selected seminar reports available upon request*]

Public sector policy reform: Making it work for women

What personnel policies are required to enhance the participation of developing country women at the public sector management level? Recommending such policies was the main challenge posed to participants of a recent seminar organized by UNDTCD.

The 15–19 October seminar, hosted by the International Centre for Public Enterprises in Developing Countries in Ljubljana, Yugoslavia and supported by the Government of Japan, was attended by over 40 government officials from all regions of the world.

Nairobi mandate

Part of the efforts of UNDTCD to implement the Nairobi Forward-looking Strategies for the Advancement of Women, the seminar built on earlier work of the Department's Division of Development Administration in the field of women in public administration.

In 1979, for example, UNDTCD cooperated with the Division for the Advancement of Women in Vienna in preparing training material to promote the advancement of women in government decision-making. In 1987, it organized a pilot interregional workshop at the Economic and Social Commission for Asia and the Pacific (ESCAP) in Bangkok on career development for managerial women. The revised workshop guide was subsequently produced as a training package in English and Spanish (*Policy Development for Increasing the Role of Women in Public Management*).

Subregional workshop

In July 1990, in preparation for the interregional seminar in Ljubljana, a subregional workshop was held at the National Institute of Public Administration in Malaysia. At this workshop, participating civil service commissioners and senior personnel managers from Malaysia, Thailand and the Philippines formulated very country-specific and practical policy recommendations aimed at improving the opportunities of women to become public sector managers.

In Yugoslavia, the aim was to sensitize senior civil service managers - sitize senior civil service managers—men as well as women—to the need to ensure that the broad administrative reform programmes now being introduced in many developing country governments incorporate policies which enhance the role of women in the public sector.

Comprehensive concerns

The Yugoslavia seminar was not designed to be as country-specific in its recommendations, given its interregional character. As in Malaysia, however, the focus encompassed not only career development, but policies affecting the training of women, their recruitment and placement, professional development as related to task assignment, mobility, benefits and performance evaluation.

Running through many of these recommendations was the theme that personnel policies which do not fully consider and accommodate the particiand secondary schools.

Structural adjustment: impact on women

Another key concern dealt with was that the civil service retrenchment being carried out under structural adjusment programmes can easily have a more negative impact on women than on men because women often hold less advantageous positions. The seminar recommended that mechanisms be set up to monitor the gender-impact of these programmes and to protect women's interests within them.

The recommendations formulated at this seminar will be synthesized in a book to be published as part of the Division's Administrative Innovations series. This book will also draw on material from the 1987 training package and the conclusions reached at the subregional meeting in July 1990. ■

The Yugoslavia seminar stressed the need to correct gender-bias in educational and training opportunities at the lowest levels of schooling

should be modified. Also addressed was the need to correct gender-bias in educational and training opportunities, including at the lowest levels of primary

China Census 1990: Fourth and most self-reliant

Outreach efforts greatly contributed to the success of the 1990 census. In the photo Inner Mongolian students are distributing leaflets to the public on the census procedure.

China carried out her fourth and largest ever population census in July 1990 with far less outside assistance than was possible during the country's third census, in 1982.

Over 8 million census workers canvassed every household in China during the first ten days of July 1990, collecting detailed demographic, social and economic data. Four months later, the Government announced that China's total population had reached 1,160,017,381 persons. For the 30 mainland provinces, autonomous regions and municipalities where the census enumeration took place, the total population was 1,133,682,501.

Excellent quality

During the 12 months prior to the census date, over 23 million people were born and 7 million died. The crude birth rate for the year was 21.0 per thousand people and the crude death rate was 6.3 per thousand, resulting in a natural rate of increase of 1.47 per cent. The quality of this census was excellent: according to a post enumeration survey, the net omission rate was only 0.6 per thousand population.

A publicity parade for the 1990 census. The banner calls for the whole country to be mobilized to ensure that the census is a success.

UNDTCD assistance to China in preparation for this census was aimed at ensuring the country could carry it out in a self-reliant manner.

During the late 1980's, UNDTCD helped the Government strengthen the data processing capability of the prefecture-level statistical offices with microcomputers and other technical facilities. These computers are now playing a crucial role in the newly created decentralized data processing network and provide a key linkage between provincial and local county census processing.

Training provided

Since the completion of the 1982 census, UNDTCD has also been assisting the Government in training technical personnel and strengthening regional statistical centres.

Finally, UNDTCD and the United Nations Statistical Office technical staff provided advisory services related to the planning of census enumeration, processing of census returns and tabulation, dissemination and utilization of census data.

With these technical and human resources in place, however, the Chinese Government carried out the monumental 1990 population census largely by itself.

Planning for the census in 1988 and active preparation for census enumeration began in early 1989. A national pilot census was conducted in April 1989, followed by provincial and local census tests and training.

Complete census infrastructure

On 25 October 1989, the Statute for the fourth population census was promulgated. A national census leading group and its technical census office

[See **China Census** *on page 8*]

Advisers: **An integrated roster** available

UNDTCD has enhanced the access of developing countries to the full range of United Nations technical advisory services with the recent publication of an integrated roster of advisers.

The roster, now available in English (French and Spanish versions will follow) contains the curriculum vitae of some 160 advisers from UNDTCD and from the United Nations regional commissions, listed by their respective fields of expertise. This is the first time such an integrated roster has been produced by the United Nations.

UNDTCD advisory services, financed through the United Nations Regualar Programme of Technical Co-operation and other sources, are available in all the main fields of the Department's competence: energy, minerals, water, infrastructure, public administration, public financial and enterprise management, population, development planning and policies, social development and statistics.

Multi-disciplinary assistance involving the combined servies of two or more advisers is also provided. Governments may obtain advisory services on questions related to policy, country programming or for training needs.

The regional commissions' advisers work within their respective regions: Asia, Europe, Latin America and the Caribbean, Asia and the Pacific, and West Asia.

The roster is being sent to governments and UNDP field offices and is available from UNDTCD in New York upon request. ■

New Advisers:

Michel Bellavance
Canada
Public Administration

Jeanne-Marie Col
U.S.A.
Public Administration

Bernard Nicolet
France
Minerals

Tribute to **Adolfo Vargas**

It is with deep regret and sorrow that we acknowledge the untimely death of Mr. Adolfo Vargas, Officer-in-Charge of the Energy Resources Branch of the Natural Resources and Energy Division. His sudden and tragic passing has caused a profound sense of loss in the hearts of his colleagues.

Mr. Vargas was a pillar of the energy programme of UNDTCD and his serious, dedicated approach to helping developing countries meet their energy needs set the highest standard for those who had the privilege to serve under him. He will be particularly remembered for conceptualizing and promoting national energy information systems and interregional training centres.

A simple, scholarly man, he was known for his creative ideas and ability to translate those ideas into successful technical co-operation projects. He will be sorely missed by his family, colleagues and friends both here in New York and around the world.

Update: Interregional workshops/seminars

20–28 February 1991, Thailand
12th UN Regional Cartographic Conference for Asia and the Pacific

4–8 March 1991, Senegal
New approaches in Regional Planning

22–25 April 1991, Canary Islands
Workshop on Overexploitation of Aquifers in Developing Countries

[*From* **China Census** *on page 7*]

were established at the State Council and corresponding leading groups and offices were then set up in all provinces, prefectures, counties, cities, townships, villages, neighborhoods and streets.

The fourth census gathered crucial data which the government can tap for a variety of planning purposes. A total of 21 census items covered various demographic social and economic questions for each individual as well as household, including ethnicity, education, fertility, mortality, migration, industry and occupation.

Publicity campaign

One month before the enumeration got underway, a census publicity campaign was launched nationwide. As the census day approached, the campaign was intensified. Extensive publicity was carried out by local government and census offices.

Upon completion of the field enumeration work, the manual tabulation and the post enumeration survey were carried out. Tabulations of ten per cent of the census return should be completed by May 1991, while the final census results are scheduled to be published by mid-1992. ■

To our readers:

Your contributions, letters and views are welcome. Write to:

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